

In the Claims

PLEASE CANCEL CLAIMS 2 AND 3 BEFORE CALCULATION OF THE FILING FEE. AFTER GRANT OF A FILING DATE FOR THIS CONTINUATION APPLICATION, BUT BEFORE CALCULATION OF THE FILING FEE, PLEASE CANCEL CLAIM 1.

PLEASE ADD THE FOLLOWING NEW CLAIMS:

- 5 4. An apparatus for processing a diamond film substrate, said apparatus comprising:
- (a) a holder for receiving the diamond film substrate; and
 - (b) a laser system configured to first direct a first wavelength of laser light toward the holder at a diamond film substrate having a surface, said surface having an initial surface roughness, R_0 , to both evaporate a portion of the substrate surface and create a structurally weakened surface having an intermediate surface roughness, R_i ; and
- further configured to subsequently direct a second wavelength of laser light to at least a portion of the structurally weakened substrate surface having an intermediate surface roughness, R_i , to remove the structurally weakened surface to modify the surface of at least a part of said portion to a final surface roughness, R_F , wherein said first and second wavelengths of laser light are different wavelengths of laser light.
- 6 5. The apparatus of claim 4 wherein the first wavelength is greater than the second wavelength.

6 The apparatus of claim 4 wherein the first wavelength is less than the second wavelength.

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7. The apparatus of claim 4 wherein the laser system is comprised of a first laser system configured to first direct a first wavelength of laser light toward the holder at a diamond film substrate having a surface, said surface having an initial surface roughness, R_0 , to both evaporate a portion of the substrate surface and create a structurally weakened surface having an intermediate surface roughness, R_i and second laser system configured to subsequently direct a second wavelength of laser light to at least a portion of the structurally weakened substrate surface having an intermediate surface roughness, R_i , to remove the structurally weakened surface to modify the surface of at least a part of said portion to a final surface roughness, R_F .

8. An apparatus for processing a diamond film substrate, said apparatus comprising:
- (a) a holder for receiving the diamond film substrate; and
 - (b) a first laser system configured to first direct a first wavelength of laser light toward the holder at a diamond film substrate having a surface, said surface having an initial surface roughness, R_0 , to both evaporate a portion of the substrate surface and create a structurally weakened surface having an intermediate surface roughness, R_i ; and
 - (c) a second laser system configured to subsequently direct a second wavelength of laser light to at least a portion of the structurally weakened substrate surface having an intermediate surface roughness, R_i , to remove the structurally weakened surface to modify the surface of at least a part of said portion to a final surface roughness, R_F ;

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